2018-2027

U.S. v. Oregon Management Agreement

Production Tables

As Modified

January 2019

Table B1. Spring Chinook Salmon Production For Brood Years 2018-2027.

Basin: Columbia River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 22]	Non- Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Yakima River (Various Release Sites)	Cle Elum Hatchery	Yakima	Yearling	810,000	100% Ad-CWT	0	Supplementation	BPA	
Twisp River Acc. Site	Methow	Twisp	Yearling	29,123	100% CWT only	29,123	Supplementation	Douglas, PUD (NNI)	3,4
Chewuch River Acc. Site	Methow	Methow Composite	Yearling	60,516	100% CWT only	60,516	Supplementation	Chelan PUD (NNI)	3,4,17
On Station	Methow	Methow Composite	Yearling	134,126	100% CWT only	134,126	Supplementation	Grant, Douglas PUDs (NNI)	3,4,18
On Station	Winthrop NFH	Methow Composite	Yearling	400,000	100% Ad-CWT	0	Fishery/ Supplementation	BR	5
Okanogan River or other agreed to Acc. Sites	Winthrop NFH	Methow Composite	Yearling	200,000	100% Ad-CWT	0	Fishery/ Supplementation	BR/BPA	5
Columbia River/CJH	Chief Joseph Hatchery	Leavenworth/ Carson	Yearling	258,300	100% Ad-Clip	0	Fishery (Segregated)	Chelan, Douglas, Grant PUDs (NNI)	23
Chiwawa R. Acc. Site	Eastbank	Chiwawa	Yearling	144,026	100% CWT	144,026	Supplementation	Chelan PUD (NNI)	3,4
Nason Creek	Eastbank FH	Nason/Chiwawa/W enatchee	Yearling	223,670	125K CWT only, 98,670 Ad/CWT	125,000	Supplementation	Grant PUD (NNI)	3,4,19
On Station	Leavenworth NFH	Carson	Yearling	1,200,000	200K Ad-CWT, 100% Ad-Clip	0	Fishery	BR	6
Walla Walla River	Carson NFH	Carson	Yearling	250,000	100% Ad-Clip,50K Ad-CW	0	Supplementation	Mitchell Act	7
Touchet	Lyons Ferry	Carson	Yearling	250,000	100% Ad Clip, 85K AD/CWT	0	Fishery	LSRCP	
Subtotal				**3,959,461**		**492,791**			

Table B1. Spring Chinook - continued

Basin: Snake River

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 22]	Non- Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Tucannon	Tucannon/ Lyons Ferry	Tucannon	Smolt	225,000	100%CWT	225,000	Supplementation	LSRCP/BPA	
Asotin	TBD	TBD	Smolt	TBD	TBD	TBD	Supplementation	LSRCP/BPA FCRPS	21
Meadow Creek (Selway)	NPTH	Clearwater/RR	Parr	400,000		400,000	Supplementation	BPA	
Lolo Creek (Yoosa/Camp Cr.)	NPTH	Clearwater/RR	Presmolt	150,000	100% CWT	150,000	Supplementation	BPA	
Newsome Creek	NPTH	Clearwater/RR	Presmolt	75,000	100% CWT	75,000	Supplementation	BPA	
Clearwater River/NPTH	NPTH/ Dworshak NFH	Clearwater/RR	Smolt	200,000	60,000 Ad w/ some CWT	140,000	Supplementation/ Fishery	BPA	
Upper Selway-Magruder	Dworshak NFH	Clearwater/RR	Parr	300,000	PBT	300,000	Supplementation	LSRCP	
Lower Selway	Clearwater FH	Clearwater/RR	Smolt	400,000	66% Ad, 33% CWT/No Ad	133,000	Supplementation/ Fishery	LSRCP	
Clear Cr.	Clearwater FH	Clearwater/RR	Smolt	635,000	100% Ad-Clip	0	Fishery	LSRCP	
Red R. Pond (S.F.Cl)	Clearwater FH	Clearwater/RR	Smolt	1,100,000	100% Ad-Clip	0	Fishery	LSRCP	
On Station	Kooskia NFH	Kooskia/ Clearwater/RR	Smolt	650,000	600,000 Ad- Clip	50,000	Fishery/ Supplementation	FWS	8
On Station	Dworshak NFH	Dworshak/ Clearwater/RR	Smolt	1,050,000	100% Ad-Clip	0	Fishery	LSRCP	
On Station	Rapid River	Rapid River	Smolt	2,500,000	100% Ad-Clip	0	Fishery	IPC	
Little Salmon River	Rapid River	Rapid River	Smolt	150,000	100% Ad-Clip	0	Fishery	IPC	9
Hells Canyon –Snake R.	Rapid River	Rapid River	Smolt	350,000	100% Ad-Clip	0	Fishery	IPC	9
On Station Upper Salmon R.	Sawtooth FH	Upper Salmon River	Smolt	1,000,000	Ad-Clip		Fishery	LSRCP	10
Yankee Fork	Sawtooth/ Crystal Springs FH	Upper Salmon River/ Yankee Fork	Smolt	300,000	100% Ad-Clip	0	Supplementation/ Fishery	LSRCP/BPA	11
Catherine Creek	Lookingglass	Catherine Creek	Smolt	150,000			Supplementation/ Fishery	LSRCP/BPA	12
Upper Grande Ronde	Lookingglass	U. Grande Ronde	Smolt	250,000			Supplementation/ Fishery	LSRCP/BPA	12

Table B1. Spring Chinook - continued

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 22]	Non- Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Lostine River	Lookingglass	Lostine	Smolt	250,000	100% Ad-Clip		Supplementation/ Fishery	LSRCP/BPA	13
Lookingglass Creek	Lookingglass	Lookingglass	Smolts	250,000			Fishery/ Reintroduction	LSRCP	12
Imnaha River sub-basin	Lookingglass	Imnaha	Smolt	490,000	100% Ad-Clip		Supplementation/ Fishery	LSRCP	14
Subtotal				**10,875,000**		**1,473,000**			

Basin: Columbia River, Bonneville to McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 22]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Hood River	Round Butte/ Parkdale	Hood	Yearling	250,000	100% AD-Clip	0	Reintroduction/ Fishery	BPA	15
On Station	Warm Springs NFH	Deschutes	Yearling	750,000	100% Ad-CWT	0	Fishery	FWS	
On Station	Round Butte	Deschutes	Yearling	380,000	100% Ad; 240K Ad-CWT	0	Fishery	PGE	20
Umatilla River	Umatilla	Umatilla/Carson	Yearling	660,000	100% Ad-Clip, 60k Ad-CW	0	Fishery	BPA	
Umatilla River	Umatilla	Umatilla/Carson	Yearling	150,000	100% CWT only	150,000	Supplementation	BPA	
Klickitat	Klickitat	Klickitat	Yearling	600,000	100% Ad-Clip, 200KCWT	0	Supplementation/ Fishery	MA/BPA	16
Klickitat (above Castile)	Klickitat	Klickitat	Adult Outplants	TBD	Evaluation Mark		Supplementation	MA/BPA	16
On Station (Drano Lake)	Little White Salmon NFH	Carson	Yearling	1,000,000	75K Ad-CWT, 100% Ad-Clip	0	Fishery	MA	
On Station	Carson NFH	Carson	Yearling	1,170,000	75K Ad-CWT, 100% Ad-Clip	0	Fishery	MA	7
Subtotal				**4,960,000**		**150,000**			
Grand Total-Spring Chinook Salmon				**19,794,461**		**2,115,791**			

Footnotes for Table B1: Spring Chinook Salmon

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may propose to use mark-selective fishing techniques in spring Chinook fisheries that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural origin stock assessment. In agreeing to Table A1 (Spring Chinook Harvest Rate Schedule), the Parties expect that mainstem fisheries on upriver spring Chinook will achieve catches roughly matching those shown in Catch Balance Model. Allocation should not exceed 50/50 harvest share. As described in Part II, Section A.1, the Parties will monitor whether those expectations are being met. If they are not, the Parties will discuss whether to modify this Agreement so as better to meet those catch expectations.
2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags. Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.
3. No Net Impact (NNI) production subject to recalculation beginning with the 2014 release and every 10 years thereafter consistent with the HCPs and Settlement Agreement. These modifications are linked to measured changes in hydrosystem passage survival for plan species. Current production levels are effective for release years 2014-2023.
4. Ad-clipping and tagging will be decided by the Parties in coordination with the HCP/Settlement Agreement processes.
5. The Parties have agreed to an abundance based marking program for Winthrop NFH and annual transfer of 200,000 ad-clipped and coded wire tagged Winthrop NFH spring Chinook to the Colville Tribe when Methow Hatchery and Winthrop Hatchery are expected to meet production goals. Okanogan transfers will not occur until ESA status designations of transferred juveniles in the Okanogan are resolved. The Winthrop NFH spring Chinook program is divided into two release groups, one for release into the Methow Basin and the other to be used for re-introduction efforts in the Okanogan River. Prioritization of spring Chinook salmon broodstock will be as follows: (1) - backfill Methow Fish Hatchery broodstock shortfalls, (2) - meet Winthrop NFH on-station releases of 400,000 smolts, and (3) – provide 200,000 pre-smolts to Okanogan River. If on-station production at Winthrop NFH is expected to be at or below 200,000, adipose fin-clipping will not occur and potentially some other tag method (i.e., visible elastomer, body CWT) will be implemented to distinguish Winthrop NFH releases.
6. The Leavenworth NFH is currently undergoing a review of hatchery facilities and programmatic details. It is anticipated that there may be changes to this program during the period of this Agreement including program levels, release location and marking protocols to meet specific objectives. The Parties will collaboratively develop implementation guidelines per Part III.H of this Agreement for the Leavenworth facility. Furthermore there are a number of facility and infrastructure improvements that may require additional short term reductions to production during the active construction phase to facilitate project completion. The goal for Leavenworth hatchery was 2.2 Million spring Chinook in the 1988 Management Agreement and was reduced to 1.625 million in the 2005-2007 Interim Management Agreement. A reduction in spring Chinook production from 1.625 Million to 1.2 Million was adopted by the parties in the 2008-2017 Management Agreement as an interim action to achieve the current objectives with respect to present USFWS concerns over water quality, fish health, hatchery infrastructure issues, and ESA straying risks. The goal of the hatchery infrastructure improvements is restoration back to the 2.2 Million smolt program level. Achieving this production level is subject to the constraints imposed by water quality, fish health and ESA requirements. Leavenworth NFH began providing broodstock (adults in excess to Leavenworth NFH brood needs) to initiate a new hatchery program at Chief Joseph Hatchery beginning in brood year 2013. These broodstock transfers may continue as needed, and are subject to periodic review by the parties.
7. The Parties support implementation of a 250,000 Walla Walla spring Chinook smolt release program with production at Carson Hatchery in the interim and the NPCC master planning process for a new Walla Walla Hatchery program at the 500,000 fish level in the longer term. If the program is expanded under the NPCC process then the 250,000 production would shift back to Carson NFH.

Footnotes for Table B1. Spring Chinook - continued

8. Fish production will be prioritized with the first 50,000 (non ad-clipped) allocated for supplementation of Clear Creek, the next 600,000 (ad-clipped) for fishery purpose. Production in excess of 650,000 will be discussed by the Parties to allocate to supplementation or fisheries. The Parties are working to assess options to increase smolt production from Kooskia Hatchery either through programmatic changes or facility modifications. As a result, the target release number may change during the course of this Agreement

9. Production at Rapid River Hatchery above 2.5M will be split between Hells Canyon Dam and the Little Salmon River – alternating releases of 100,000 to Hells Canyon and 50,000 to Little Salmon River. For example: 1) 2,500,000 million Rapid River; 2) 100,000 Snake River/Hells Canyon Dam; 3) 50,000 Little Salmon; 4) 100,000 Snake River/Hells Canyon Dam; 5) 50,000 Little Salmon, etc. until all production is allocated. If production is less than 3 million, Parties will discuss options. The Parties agree that recent smolt releases do not provide adequate and consistent mitigation for adult returns at locations affected by Idaho Power Company's Hells Canyon Complex and its operations. Several Parties also are actively participating in the re-licensing of such Complex. Idaho Power Company's mitigation responsibilities, including production numbers and release locations of Rapid River spring Chinook, are a subject of these discussions. The interim target production numbers and release locations of Rapid River spring Chinook specified herein shall not affect any Party's right to pursue alternative production and release locations in connection with the development of a long-term agreement and/or in connection with the Hells Canyon re-licensing process.

10. Upper Salmon River broodstock release could be up to 1.7 million depending on egg take and facility logistics. If production is above 1.0 million, the Parties will discuss disposition of these fish. A component of the total production at this facility is produced as part of an integrated program that includes supplementing natural spawning upstream of the hatchery weir. During the building phase of the integrated broodstock, 150,000-250,000 smolts will be unclipped and 100% CWT. When the integrated smolt production component reaches 500,000, all smolts will be ad-clipped. The segregated component of the broodstock is 100% ad-clipped.
11. Smolt release numbers (up to 300,000) are determined annually through AOP process. After Crystal Springs FH is operational, transitioning this production from Sawtooth Fish Hatchery to Crystal Springs FH will be initiated through the Salmon River AOP process. It is anticipated that the release number will increase to 600k once Crystal Springs FH is in operation.
12. The marking guidelines for the Upper Grande Ronde, Catherine Creek, and Lookinglass Creek are as described in the Grande Ronde Spring Chinook Marking Guidelines found in Attachment C and referenced in the CTUIR-NPT-ODFW letter agreement dated April 28, 2008.
13. If production level is at 150,000 smolts, or less, co-managers will discuss options for not ad-clipping all, or a portion of, juvenile production to achieve minimum spawner escapement levels and broodstock targets.
14. If production level is at 225,000 smolts, or less, co-managers will discuss options for not ad-clipping all, or a portion of, juvenile production to achieve minimum spawner escapement levels and broodstock targets.
15. Hood River production will increase to 250,000 in 2018 with 100k reared at Round Butte and 150K at Parkdale. Current production is 150,000 reared at Round Butte (75K), and Parkdale (75K). All fish are acclimated and released into the West Fork Hood River with 100% Ad-only marking. Primary purpose is for re-introduction/harvest. Funding is provided by BPA.
16. Implementation of the Klickitat Basin Anadromous Fisheries Master Plan (2012) will result in upgrades at the Klickitat Hatchery and changes to this program. A phased approach will be used to gradually integrate the program and increase production to 800,000 smolts over time. First generation returns from initial integrated broodstock (in excess of brood needs) will be released in the upper Klickitat River above Castile Falls. The parties will collaborate on implementation of proposed changes to this program.
17. Chelan PUDs recalculated Methow River spring Chinook obligation of 60,516 may be acclimated at the Chewuch Acclimation Site or other sites as approved by the HCP.
18. Grant PUD’s recalculated Methow River spring Chinook obligation of 134,126 will be reared and released from the Douglas County PUD’s Methow Fish Hatchery and could be acclimated in the upper Methow (i.e. Goat Wall, Early Winters, Mid-Valley) as part of YN’s Expanded Acclimation Program, or other sites as approved by the HCP.
19. Grant PUD’s combined recalculated Wenatchee River spring Chinook obligation is 223,640 yearlings being produced at Nason Creek (125,000 are ad-present conservation program fish and 98,670 are ad-clipped backup brood fish). The White River captive brood program was phased out with BY2013.
20. Production increased from 240K to 380K for experimental study design. The 380K will consist of two groups of 150K released at 15 F/lb and one group of 80K released at 8 F/lb. Study will be conducted for 6 years beginning with BY16.
21. This hatchery program is under consideration by the Parties, but has not moved forward and implementation is not foreseeable. Prior to implementation the Parties will follow appropriate NEPA and ESA consultation process.
22. For all Spring Chinook hatchery programs above Bonneville Dam, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. One exception is the production from the Eastbank Hatchery program; parent samples are being collected, but not yet genotyped. All other hatchery programs effectively ‘tag’ ~90-100% of annual releases.
23. This production program is implemented and/or adjusted based on mid-Columbia HCP’s and Settlement Agreement.

Table B2. Summer Chinook Salmon Production for Brood Years 2018-2027.

Basin: Columbia River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark[1, 11]	Non-Ad-Clipped[2]	Primary Program Purpose	Funding	Foot-notes
Chelan River	Eastbank FH	Wells/Columbia River	Yearling	400,000	100% Ad-CWT	0	Fishery	Chelan PUD (FIC)	3,4,6
Chelan River	Eastbank FH	Wells/Columbia River	Yearling	176,000	100% Ad-CWT	0	Fishery	Chelan PUD (NNI)	3,5,6
Dryden Ponds	Eastbank	Wenatchee	Yearling	500,000	100% Ad-CWT	0	Supplementation/ Fishery	Chelan PUD (NNI)	3,5
Carlton Rearing Pond	Eastbank	Met./Okan/Wells	Yearling	200,000	100% Ad-CWT	0	Supplementation/ Fishery	Grant-PUD (NNI)	3,5,7
Okanogan/ Similkameen Rivers	Chief Joseph Hatchery	Okanogan	Sub yearling	143,570	100% Ad-CWT	0	Supplementation/ Fishery	Chelan, Douglas PUDs (NNI)	3,5,13
Okanogan/ Similkameen Rivers	Eastbank	Okananogan	Yearling	492,669	100% Ad-CWT	0	Supplementation/ Fishery	Chelan, Douglas, Grant PUDs (NNI)	3,5,13
On Station	Entiat NFH	Wells	Yearling	400,000	100% Ad-Clip, 200k Ad-CWT	0	Fishery	BR	
On Station	Wells	Wells	Yearling	320,000	100% Ad-CWT	0	Fishery	Douglas PUD (FIC)	3,4,12
On Station	Wells	Wells	Subyearling	484,000	100% Ad-CWT	0	Fishery	Douglas PUD (FIC)	3,4
Yakima Basin	Prosser/Marion Drain	Wells	Subyearling	1,000,000	TBD	TBD	Parties to assess Reintroduction feasibility	BPA	9
Subtotal				**4,116,239**		**0**			

Table B2. Summer Chinook - continued

Basin: Snake River

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 11]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Johnson Creek	McCall Hatchery	Johnson Cr.	Smolt	150,000	100% CWT-VIE	150,000	Supplementation	BPA	
Knox Bridge	McCall Hatchery	South Fork	Smolt	1,000,000	Ad-Clip		Fishery	LSRCP	8
Pahsimeroi Ponds	Pahsimeroi	Pahsimeroi	Smolt	1,000,000	935,000 Ad-Clip	65,000	Fishery	IPC	
Curtis Cr/Cabin Cr	McCall Hatchery	South Fork	Eyed Egg	300,000		300,000	Supplementation	BPA/ LSRCP	
Panther Creek	TBD	TBD	TBD	TBD	TBD	TBD	Supplementation/Fishery	BPA/ FCRPS	10
Subtotal			**Smolts**	**2,150,000**		**215,000**			
Grand Total- Summer Chinook Salmon				**6,266,239**		**215,000**			

Footnotes for Table B2: Summer Chinook Salmon

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may propose to use mark-selective fishing techniques in summer Chinook fisheries that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural origin stock assessment.

2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags. Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.
3. These production programs are implemented and/or adjusted based on mid-Columbia HCP's and Settlement Agreement. The Parties are pursuing new acclimation facilities tied to these existing programs.
4. Fixed inundation compensation (FIC). Not subject to recalculation by the mid-Columbia HCP's or Settlement Agreement.
5. No Net Impact (NNI) production subject to recalculation beginning with the 2014 release and every 10 years thereafter consistent with the HCPs and Settlement Agreement. These modifications are linked to measured changes in hydrosystem passage survival for plan species. Current production levels are effective for release years 2014-2023.
6. The 100% AD-CWT marking of the program is required to measure contribution to harvest and straying of the Chelan Falls summer Chinook program (to non-target areas) consistent with meeting/addressing HCP-HC monitoring and evaluation objectives.
7. If there are insufficient numbers of Methow/Okanogan broodstock available then Wells stock will be used to make up shortfall.
8. A component of the total production at this facility is produced as part of an integrated program that includes supplementing natural spawning upstream of the hatchery weir. During the building phase of the integrated broodstock, 150,000-250,000 smolts will be unclipped and 100% CWT. When the integrated smolt production component reaches 500,000, all smolts will be ad-clipped. The segregated component of the broodstock is 100% ad-clipped.

9. Implementation of the Yakima Subbasin Summer/Fall Chinook and Coho Salmon Hatchery Master Plan (2012) will result in upgrades to the Prosser and Marion Drain facilities to accommodate change to the current program. The Yakima release of summer-run may include 250,000 yearlings and 250,000 subyearlings to maximize adult recruitment initially (yearlings have a higher post-release survival). As local returns become available in sufficient numbers, the production will then transition to 1,000,000 sub-yearlings. Transition from Wells to local brood source will occur over time.
10. Per Part III.H, the parties continue to review options for Panther Creek to initiate program and develop details for program objectives, rearing strategy and facilities, and mark plan. The current proposal being evaluated is to release up to 400,000 smolts annually.
11. For all Summer Chinook hatchery programs, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. One exception is the production from the Eastbank Hatchery program; parent samples are being collected, but not yet genotyped. All other hatchery programs effectively 'tag' ~90-100% of annual releases.
12. Up to an additional 200,000 yearling summer Chinook may be produced at Wells to provide fish for juvenile passage studies as required by the Wells HCP.

13. If there are insufficient numbers of natural origin Okanogan broodstock available then a composite natural origin broodstock collected at Wells Dam may be used to make up the shortfall.

Table B3. Sockeye Salmon Production for Brood Years 2018-2027.

Basin: Columbia River and Snake River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Stanley Basin		Snake River	Smolt	1,000,000	100% Ad-Clip	0	Supplementation	BPA FCRPS	5
Wallowa Lake		TBD	TBD	TBD		TBD	Reintroduction	BPA FCRPS	3
Lake Cle Elum/Yakima Basin Lakes		Okanogan/ Wenatchee	Adults	Up to 10,000		Up to 10,000	Reintroduction	TBD	4
Grand Total- Sockeye Salmon		**Smolts**		**1,000,000**		**0**			

Footnotes for Table B3: Sockeye Salmon

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may propose to use mark-selective fishing techniques that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural origin stock assessment.

2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags. Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.

3. Parties commit to developing a plan for reintroduction of sockeye in Wallowa Lake should funds become available. Rearing facilities, stock, release numbers, and marks will be determined in this planning process. Parties commit to implementation of this plan pending funding availability. This hatchery program is under consideration by the Parties, but has not moved forward and implementation is not foreseeable. Prior to implementation the Parties will follow appropriate NEPA and ESA consultation processes.

4. Juvenile releases are on hold until appropriate facilities can be identified. The Parties commit to developing a plan for reintroduction of sockeye in Lake Cle Elum (and possibly other historic sockeye nursery lakes in the Yakima Basin) should funds become available. Rearing facilities, stock, release numbers, and marks will be determined in this planning process. Parties commit to implementation of this plan pending funding availability. The transfer of adults from Priest Rapids Dam to the Yakima Basin is triggered by sockeye adult counts of at least 80,000 at Bonneville Dam. If implemented in a given year, the range of adults transferred is 1,000 to 10,000, calculated from a sliding scale which is based on run strength.

5. For the Snake R. Sockeye hatchery program, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. The hatchery program effectively 'tags' ~90-100% of the annual release.

Table B4. Snake River fall Chinook Salmon production priorities for the Lower Snake River Compensation Program (LSRCP) at Lyons Ferry Hatchery, the Fall Chinook Acclimation Program (FCAP), and the Idaho Power Program (IPC) for Brood Years 2018-2027. (For other Fall Chinook Production, see Table B5)

Production Program					
Priority	**Rearing Facility**	**Number**	**Age**	**Release Location(s)**	**Marking [1, 2]**
1	Lyons Ferry	450,000	1+	On station[3]	450K AdCWT
2	Lyons Ferry	450,000	0+	Captain John Rapids	200K AdCWT, 250K no clip
3	Lyons Ferry	450,000	0+	Big Canyon	200K AdCWT, 250K no clip
4	Lyons Ferry	500,000	0+	On Station	200K AdCWT, 300K no clip
5	Lyons Ferry	400,000	0+	Pittsburg Landing	200K AdCWT, 200K no clip
6	Lyons Ferry	200,000	0+	Captain John Rapids-2	200K AdCWT
7	Lyons Ferry	200,000	0+	Big Canyon-2	200K AdCWT
8	Lyons Ferry	200,000	0+	Pittsburg Landing-2	200K AdCWT
9	Irrigon	1,000,000	0+	Salmon River[4]	200K AdCWT, 800K no clip
10	Irrigon	200,000	0+	Grand Ronde River	200K AdCWT
11	Lyons Ferry	200,000	0+	On Station[5]	200K no clip
TOTAL	Yearlings	450,000			
	Subyearlings	3,800,000			

Table B4- continued. Snake River fall Chinook salmon production priorities for Nez Perce Tribal Hatchery - for Brood Years 2018-2027.

Priority	Number	Age	Life History	Release Location(s)	Marking
1	500,000	0+	Standard	On station	100K AdCWT, 400K no-clip
2	350,000	0+	Early-spawning	Luke's Gulch[6]	100K AdCWT, 250K no clip
	350,000	0+	Early-spawning	Cedar Flats[6]	100K AdCWT, 250K no clip
3	200,000	0+	Standard	North Lapwai Valley[7]	100K AdCWT, 100K no clip
TOTAL	1,400,000	Subyearlings			

Footnotes for Table B4: Snake River Fall Chinook Salmon

1. The Parties expect that fisheries conducted in accordance with the harvest provisions of this Agreement will not compromise broodstock acquisition. If broodstock acquisition is nevertheless compromised by the current mark strategy and as a result of implementation of mark selective fisheries for fall Chinook in the ocean or Columbia/Snake River mainstem, the Parties will revisit the marking strategy during the course of this Agreement.
2. For all Snake River Fall Chinook hatchery programs, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. The hatchery programs effectively 'tag' ~90-100% of annual releases.
3. The Parties agree during the term of the Agreement to re-evaluate and discuss the reduction and/or substitution of the yearling program at LFH to subyearlings.
4. Beginning with BY18, the releases of subyearlings at Hells Canyon Dam will be moved to the Salmon River. Several Parties are actively participating in the re-licensing of Idaho Power Company's Hells Canyon Complex and its operations. Idaho Power Company's mitigation responsibilities, including production numbers and release locations are a subject of these discussions. The production numbers and release locations of fall Chinook specified herein shall not affect any Party's right to pursue alternative production and release locations in connection with the development of a long-term agreement and/or in connection with the Hells Canyon re-licensing process. The adult return information from these releases will inform the Parties as they consider whether to move additional release locations during the course of the Management Agreement.
5. If available, these fish will be included with Priority #4 and do not require an additional AdCWT group or PIT tags.
6. Anticipated release numbers based on facility capacity. Actual release numbers may be less depending on environmental conditions. Fish not released at these sites will be released on station at NPTH.
7. If environmental conditions preclude acclimation at North Lapwai Valley these fish will be released on station at NPTH.

Table B5. Fall Chinook Salmon Production for Brood Years 2018-2027 (Several programs may change pending the outcome of John Day Mitigation discussions. The Parties will discuss and agree to any changes prior to implementation (For Snake R. Basin production, see Table B4). The grand total at the bottom of this table includes all Snake R. Fall Chinook releases from Table B4.

Basin: Columbia River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 11]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Prosser	Prosser	URB-Local	Subyearling	500,000		500,000	Supplementation/ Fishery	BPA	
On Station Prosser	Little White Salmon NFH	URB	Subyearling	1,700,000	200K Ad-CWT, 100% Ad-Clip	0	Fishery	MA/COE	3,9,10
On Station Prosser	Bonneville	URB	Yearling	450,000	100% Ad/CWT	0	Fishery	COE	3,9,10
On Station Ringold	Bonneville	URB	Subyearling	4,500,000	100% Ad-Clip, 430k Ad-CWT	0	Fishery	COE	9,10
On Station Priest Rapids	Priest Rapids Hatchery	URB	Subyearling	326,000	TBD	TBD	Fishery	Grant PUD (NNI)	4,5
On Station Priest Rapids	Priest Rapids Hatchery	URB	Subyearling	5,000,000	600K Ad-CWT, 600k Ad-Clip	TBD	Fishery	Grant PUD (FIC)	4,6
Priest Rapids Reservoir	Priest Rapids Hatchery	URB	Subyearling	273,961	TBD	TBD	Fishery	Grant PUD	4,7
On Station Priest Rapids	Priest Rapids Hatchery	URB	Subyearling	1,700,000	100% Ad-Clip, CWT-TBD	0	Fishery	COE	9,10
Subtotal				**14,449,961**		**500,000**			

Basin: Columbia River, Bonneville to McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 11]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
On Station	Little White Salmon NFH	MCB	Subyearling	4,500,000	200K Ad-CWT, 200k CWT only, 4.1M Ad-Clip	200,000	Fishery	COE	9
On Station	Willard NFH	MCB	Subyearling	2,000,000	200K Ad-CWT, 200K CWT only, 1.6M Ad-Clip	200,000	Fishery	MA	
Umatilla River	Umatilla	MCB	Subyearling	600,000	100% Ad-clip 150k Ad-CWT	0	Fishery/ Supplementation	BPA	

Table B5. Fall Chinook - continued

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 11]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Umatilla River (Pendleton Acclimation Site)	Bonneville	MCB	Yearling	780,000	100% Ad-Clip, 120k Ad-CWT	0	Fishery/ Supplementation	COE	9
Umatilla River	Bonneville	MCB	Yearling	120,000	100% Ad-CWT	0	Fishery/ Supplementation	COE	9
Klickitat	Klickitat Hatchery	MCB	Subyearling	4,000,000	650k Ad-CWT, 100% Ad-clip	0	Fishery	MA	8
On Station	Spring Creek NFH	Tule	Subyearling	10,500,000	450K Ad-CWT, 450K CWT-only, 9.6M Ad-clip only	450,000	Fishery	COE	9
Subtotal (Bonn-MCN)				**22,500,000**		**850,000**			
Subtotal Table B5				**36,949,961**		**1,350,000**			
Subtotal Table B4				**5,650,000**		**3,000,000**			
Grand Total- Fall Chinook Salmon				**42,599,961**		**4,350,000**			

Footnotes for Table B5: Fall Chinook Salmon

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may use mark-selective fishing techniques that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Allocation should not exceed 50% of the harvestable surplus. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural origin stock assessment.
2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.
3. Implementation of the Yakima Subbasin Summer/Fall Chinook and Coho Salmon Hatchery Master Plan (2012) will result in upgrades to the Prosser and Marion Drain facilities to accommodate changes to the current program. It is the intent of the Parties to phase out releases from LWS NFH and replace them with fish (eggs) from Priest Rapids Hatchery, adults collected at the Priest Rapids Dam OLAFT (off ladder adult fish trap), Ringold Springs Hatchery, or adult collected from new facilities in the lower Yakima River. The Parties also propose to move acclimation and release of the 1.7M Yakima River fall Chinook program to a new facility to be constructed in the lower Yakima River (below RM 10) pursuant to John Day mitigation negotiations with the U.S. Army Corps of Engineers.
4. The Parties recognize that fall Chinook from Grant PUD-funded releases may, in some years, provide the principal source of harvestable fall Chinook available to non-treaty fisheries under Part II of this Agreement. The Parties may agree to mass mark Grant PUD-funded fall Chinook releases with an adipose fin clip to facilitate implementation of the fall Chinook harvest provisions of this Agreement.
5. No Net Impact (NNI) production subject to recalculation beginning with the 2014 release and every 10 years thereafter consistent with the HCPs and Settlement Agreement. These modifications are linked to measured changes in hydrosystem passage survival for plan species. Current production levels are effective for release years 2014-2023.
6. Fixed inundation compensation. Not subject to recalculation by the mid-Columbia HCPs or Settlement Agreement.
7. Fixed inundation compensation. Not subject to recalculation by the mid-Columbia HCPs or Settlement Agreement, however, in 2013 the Parties agreed to convert the fry program to subyearlings based upon a higher adult return for subyearling versus fry releases. Production was implemented in the fall of 2013 concurrent with the completion of the Priest Rapids Hatchery rebuild.
8. Implementation of the Klickitat Basin Anadromous Fisheries Master Plan (2012) will result in upgrades at the Klickitat Hatchery and changes to this program if and when a lower Klickitat River acclimation facility is constructed. The current plan is to continue to receive eggs from LWS NFH for this program. While the goal is to AD clip 100% of this production, water and space limitations within the existing infrastructure preclude 100% marking without posing substantial risk to fish survival. The Parties will collaborate on implementation of proposed changes to this program.
9. Parties have worked jointly with the USACOE to develop a long-term production plan designed to meet the basic tenets of an improved in-place, in-kind John Day and The Dalles Dam (JD/TD) Mitigation program and reach the 107,000 Total Adult Production (TAP) goal.
10. The Parties have agreed to an expanded JDM production to meet the 107,000 Total Adult Production mitigation obligation of the COE. This expansion includes construction of a new full cycle facility at Ringold and an acclimation/adult collection facility at the I-182 site in the lower Yakima River. It is anticipated that construction will occur in 2019 (pending funding) and production will start in 2020. The Parties anticipated that an additional 7,250,000 sub-yearling and 500,000 yearling Chinook will be produced from this expansion. Expected releases are: Ringold – 10,400,000 sub-yearlings (which will include the 3,500,000 currently released at Ringold and the 1,700,000 currently releases at Priest Rapids Hatchery). I-182 – 3,750,000 sub-yearlings (which includes the 1,700,000 currently released at Prosser) and 500,000 yearlings (of which 210,000 are currently being released at Prosser, with planned addition for 240,000 targeted for release at Prosser pending COE funding).
11. For all Fall Chinook hatchery programs above Bonneville Dam, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. The hatchery programs effectively 'tag' ~90-100% of annual releases.

Table B6. Steelhead Production for Brood Years 2019-2028 (parents returning to freshwater in 2018-2027).

Basin: Columbia River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 20]	Non-Ad-Clipped[2,3]	Primary Program Purpose	Funding	Foot-notes
Wenatchee Basin, various locations	Eastbank/ Chiwawa	Wenatchee	Smolt	123,650	100% CWT only	123,650	Supplementation	Chelan PUD (NNI and FIC)	4,5,6,17
Wenatchee Basin, various locations	Eastbank/ Chiwawa	Wenatchee	Smolt	123,650	100% Ad-Clip	0	Fishery/ Supplementation	Chelan PUD (NNI and FIC)	4,5,6,17
Methow River, various locations	Wells	Wells/Methow	Smolt	100,000	100% Ad-Clip	0	Supplementation/ Fishery	Douglas PUD (FIC)	4,6,7
Twisp River Various locations	Wells	Wells/Methow	Smolt	48,000	100% CWT only	48,000	Supplementation	Douglas PUD (NNI and FIC)	4,5,6,18
Upper Columbia River	Wells	Wells/Methow	Smolt	160,000	100% Ad-Clip	0	Supplementation/ Fishery	Douglas PUD (FIC)	4,6
On Station-various locations	Winthrop NFH	Wells/Methow	Smolt	100,000-200,000	100% Ad-Clip	0	Fishery/ Supplementation	BR	7
Okanogan River multiple locations	Wells	Wells/Okanogan	Smolt	100,000	100% Ad-Clip	0	Fishery	Grant PUD	4,8
Upper Columbia River	Winthrop NFH	Upper Columbia	Recon. Kelt	50-100	PIT Tag	50-100	Supplementation	BPA	
Yakima River	Prosser Hatchery	Yakima	Recon. Kelt	300-500	PIT Tag	300-500	Supplementation	BPA	
On Station	Ringold	Wells	Smolt	180,000	100% Ad-RVClip	0	Fishery	MA	
Touchet River	Lyons Ferry	Wallowa A	Smolt	100,000	20K CWT, 100% Ad-Clip	0	Fishery	LSRCP	
Touchet River	Lyons Ferry	Touchet A	Smolt	50,000	100% CWT	50,000	Broodstock Evaluation/ Supplementation	LSRCP	
Subtotal			**Smolts**	**1,085,300**		**221,650**			
			Kelts	**350-600**		**350-600**			

Table B6. Steelhead - continued

Basin: Snake River

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 20]	Non-Ad-Clipped[2,3]	Primary Program Purpose	Funding	Foot-notes
Tucannon River	Tucannon/ Lyons Ferry	Tucannon A	Smolt	150,000	25K Ad/CWT, 50K CWT only	50,000	Fishery/ Supplementation	LSRCP/BPA	9,19
Lyons Ferry Hatchery	Lyons Ferry	Wallowa A	Smolt	60,000	100% Ad-Clip	0	Fishery	LSRCP	9
Cottonwood Pond, Grande Ronde River	Lyons Ferry	Wallowa A	Smolt	225,000	20-45K CWT, 100% Ad-Clip	0	Fishery	LSRCP	
Little Sheep Creek, Imnaha	Irrigon	Little Sheep Cr. A	Smolt	215,000	25KCWT, 100% Ad-Clip, 4,000PIT	0	Fishery/ Supplementation	LSRCP	
Dworshak NFH	Dworshak NFH	Clearwater B	Smolt	1,200,000	100% Ad-Clip	0	Fishery	COE	11
Clear Ck, Middle Fork Clearwater	Dworshak NFH	Clearwater B	Smolt	300,000	100% Ad-Clip	0	Fishery	COE	11
Lower South Fork Clearwater – Red House Hole	Dworshak NFH	Clearwater B	Smolt	400,000	100% Ad-Clip	0	Fishery	COE	11,12
Lower South Fork Clearwater – Red House Hole	Clearwater	Clearwater B/ South Fk Cl	Smolt	220,000	100% Ad-Clip	0	Fishery	LSRCP	11,12
Lower SF Clearwater	Clearwater	Clearwater B/ South Fk Cl.	Smolt	290,000	100% Ad-Clip	0	Fishery	LSRCP	11,12
Meadow Cr., SF Clearwater	Clearwater	Clearwater B/ South Fork Cl	Smolt	210,000	No Ad-Clip	210,000	Supplementation	LSRCP/BPA FCRPS	11,12
Newsome Ck SF Clearwater	Clearwater	Clearwater B/ South Fork Cl	Smolt	123,000	No Ad-Clip	123,000	Supplementation	LSRCP/BPA FCRPS	11,12
Lolo Creek, MF Clearwater	Dworshak NFH	Clearwater B/ Lolo	Smolt	200,000	No Ad-Clip	200,000	Supplementation	COE/BPA FCRPS	11,12
East Fork Salmon	Hagerman NFH	EFSR-A	Smolt	60,000	100% no-clip w/ CWT	60,000	Supplementation/ Fishery	LSRCP	13
Yankee Fork	Magic Valley, Sawtooth	USRB/Yankee Fork	Smolt	440,000	220K Ad-Clip, 220K TBD no Ad	220,000	Supplementation/ Fishery	LSRCP	14

Table B6. Steelhead - continued

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 20]	Non-Ad-Clipped[2,3]	Primary Program Purpose	Funding	Foot-notes
Little Salmon River	Niagara Springs, Magic Valley	Oxbow A, Pah A	Smolt	<=650,000	100% Ad-Clip	0	Fishery	IPC/LSRCP	
Hells Canyon Snake River	Niagara Springs	Oxbow A	Smolt	550,000	100% Ad-Clip	0	Fishery	IPC	
Upper Salmon Tribs.	Sawtooth, Pahsimeroi	Sawtooth/ Pahsimeroi, USRB	Eggs	1 million	0		Supplementation	TBD	15
Subtotal			**Smolt**	**5,293,000**		**803,000**			

Basin: Columbia River- Bonneville to McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 20]	Non-Ad-Clipped[2,3]	Primary Program Purpose	Funding	Foot-notes
Umatilla River, Thornhollow AP	Umatilla	Umatilla Summer	Smolt	50,000	100% Ad-Clip, 20K CWT	0	Supplementation/ Fishery	BPA	
Umatilla River, Pendleton AP	Umatilla	Umatilla Summer	Smolt	100,000	100% Ad-Clip, 40K CWT/AWT	0	Supplementation/ Fishery	BPA	
Klickitat	Skamania	Skamania Summer	Smolt	90,000	100% Ad-Clip	0	Fishery	MA	16
Hood River (East and Middle Forks)	Oak Springs	Hood River Winter	Smolt	50,000	100% Ad- RM/LM Clip	0	Supplementation/ Fishery	BPA	
Subtotal			**Smolt**	**290,000**		**0**			
Grand Total - Steelhead				**6,668,300**		**1,024,650**			

Footnotes for Table B6: Steelhead

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may propose to use mark-selective fishing techniques that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Allocation should not exceed 50/50 harvest share. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural origin stock assessment.
2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.
3. The Parties' intent is that Fishery impacts on the fish identified in the table above as Non-Ad-Clipped will be similar to those of natural-origin fish. Marking/tagging for monitoring and evaluation is expected. Fish that are hatchery reared but not adipose fin clipped may be marked for monitoring and evaluation by other methods (including natural features such as scales and fin erosion) such that they can be identified as hatchery produced at counting stations and in Fishery. Monitoring and evaluation plans will be developed by the appropriate sub-basin management entities and shall be coordinated through the U.S. v. Oregon Production Advisory Committee. Annually, the Production Advisory Committee shall provide an update of the monitoring and evaluation plans to the Parties.
4. Fish may be released from multiple locations including on-site hatchery releases, direct stream releases, acclimation sites as part of the YN's Expanded Acclimation Program, or at other sites as approved by the HCP.
5. No Net Impact (NNI) production subject to recalculation beginning with the 2014 release and every 10 years thereafter consistent with the HCPs and Settlement Agreement. These modifications are linked to measured changes in hydrosystem passage survival for plan species. Current production levels are effective for release years 2014-2023.
6. Fixed inundation compensation. Not subject to recalculation by the mid-Columbia HCPs or Settlement Agreement.
7. Methow River/Winthrop NFH Steelhead Programs – The Methow River steelhead programs will change during the period covered by this Agreement. At the completion of the pending ESA consultations, a management plan guiding these changes will be developed by the Parties within 18 months. The management plan will incorporate the hatchery objectives using an integrated steelhead program, transition to increased production, fishery objectives, marking, supplementation objectives using natural origin fish, adult management, criteria for natural origin adult collection, etc. The Parties support development of steelhead acclimation facilities for these programs, which may include YN's Expanded Acclimation Program. Full implementation is subject to funding being provided by PUDs and BOR. It is the Parties intent that the production level at Winthrop NFH transition to a final size of 200,000 smolts of local Methow River stock starting with brood year 2015. Meeting the 200,000 target release size is dependent on the following factors: 1) Collection of at least 50% local, natural-origin brood annually; and 2) Completion of the ESA consultation. The local Parties commit to meeting annually to review performance of this program and to discuss any issues regarding the transition to the expanded production size.
8. The Okanogan River steelhead programs are expected to change during the period covered by this Agreement. At the completion of the pending Section 10 permitting process a management plan to guide these changes will be developed by the Parties. The management plan will incorporate the hatchery mitigation requirement using an integrated steelhead program, timing of the transition, fishery objectives, marking, supplementation objectives using natural origin fish, adult management, criteria for natural origin adult collection, etc. Current habitat for steelhead in the basin is limited and full implementation of the plan will depend upon timing and level of improvements to habitat. Full implementation is subject to funding being provided by PUDs, BPA, and BOR.
9. The on-station release at Lyons Ferry will vary from 60,000-160,000 related to smolt production targets for the Tucannon River so that the total program equals 210,000 (e.g., 150,000 Tucannon + 60,000 on-station at Lyons Ferry).
10. The Parties will collaborate on an annual basis to establish juvenile release targets and adult broodstock management above the Little Sheep Creek weir and in the hatchery. If adult returns decrease the Parties have the option to release unclipped groups of fish aimed at achieving natural escapement and broodstock goals.

Footnotes for Table B6. Steelhead - continued

11. Under current production levels, returns of hatchery Group B steelhead are expected to be sufficient to meet egg take needs for existing programs. In the event that hatchery Group B steelhead returns are projected to be less than 10,000 fish at Lower Granite Dam and sport fishery on Idaho-bound hatchery steelhead would have to be restricted to meet egg take needs, the Parties shall discuss management measures to respond to the shortfall in steelhead returns. Potential management measures include, but are not limited to: prioritizing releases for the 2019-2029 brood years, restrictions on sport and/or tribal tributary fishery, additional broodstock collection. Releases of Clearwater B steelhead in the Clearwater Basin will be prioritized over releases in the Salmon Basin. All Parties agree to take appropriate actions to equitably address a forecasted or actual broodstock shortfall. If the Parties are unable to agree on management measures to respond to the shortfall, the Parties shall modify both supplementation and fishery production actions to reflect the anticipated broodstock return.
12. Parties support collecting adults returning to South Fork Clearwater River and Lolo Creek with infrastructure development, funding support, and HGMPs to accomplish broodstock transition to locally returning adults. Parties commit to further discussion of supplementation options and release locations in the South Fork of the Clearwater.
13. The Parties support continuing collection of locally returning adults to the East Fork Salmon River with infrastructure development, funding support, and HGMPs. The Parties commit to further discussions of supplementation options and release locations for this local broodstock.
14. Parties support collecting adults returning to Yankee Fork with infrastructure development, funding support, and HGMPs to accomplish broodstock transition to locally returning adults. If surplus production from local broodstock is available, Parties will discuss release options.
15. The Parties agree on three locations for planting these eggs including Indian Creek, Panther Creek, and Yankee Fork and will investigate local broodstock collection opportunity for transitioning the program. Releases into Indian Creek will be limited to 100,000 eggs. The Parties will review information from monitoring and evaluation of the program to assess effectiveness, and if eggs from local broodstock are available will consider expanding release locations to other streams including Basin Creek and Morgan Creek.
16. Implementation of the Klickitat Basin Anadromous Fisheries Master Plan (2012) is not anticipated to result in changes to this program at this time. The Parties will collaborate on implementation of proposed changes to this program.
17. Chelan PUD's combined summer steelhead obligation in the Wenatchee River is 247,300. This obligation includes 165,000 fixed inundation compensation that is not subject to recalculation by the mid-Columbia HCPs or Settlement Agreement; and 22,000 recalculated NNI steelhead production, and 60,300 steelhead as a species trade for sockeye production. The 247,300 steelhead program is split into 123,650 supplementation program and 123,650 safety-net program.
18. The Twisp River steelhead supplementation program includes 8,000 recalculated NNI compensation and 40,000 fixed inundation compensation which is not subjected to recalculation.
19. Dependent on program size, at 75,000 all would be unclipped.
20. For all Steelhead hatchery programs above Bonneville Dam and Skamania Hatchery (located in the lower river, with releases above Bonneville Dam), tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. One exception is the production from the Eastbank Hatchery program; parent samples are being collected, but not yet genotyped. All other hatchery programs effectively 'tag' ~90-100% of annual releases.

Table B7. Coho Salmon Production for Brood Years 2018-2027

Basin: Columbia River Above McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 8]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Naches River	Eagle Creek	Eagle Cr./ Yakima	Smolt	500,000	50%CWT	500,000	Supplementation/ Fishery	BPA/MA	
Upper Yakima River	Prosser	Yakima/Eagle Cr.	Smolt	500,000	50%CWT	500,000	Supplementation/ Fishery	BPA/MA	
Columbia River (at Ringold-Meseberg FH	Kalama Falls	Kalama Falls (late stock)	Smolt	250,000	200k AD-only; 50k AD/CWT	0	Fishery	MA	
Icicle Creek (at the NFH)	Cascade/ Willard	Mid Col Local	Smolt	500,000	100% CWT only and/or PBT	500,000	Supplementation	BPA/MA/ PUD	3
Nason Creek	Cascade/ Willard	Mid Col Local	Smolt	400,000	100% CWT and/or PBT and 100% body tagged	400,000	Supplementation	BPA/MA/ PUD	3
Beaver Creek	Cascade/ Willard	Mid Col Local	Smolt	100,000	100% CWT and/or PBT and 100% body tagged	100,000	Supplementation	BPA/MA/ PUD	3
Methow Tributaries	Cascade/ Willard	Mid Col Local	Smolt	800,000	100% CWT only and/or PBT	800,000	Supplementation	BPA/MA/PUD	3
On Station	Winthrop NFH/Cascade	Mid Col Local	Smolt	200,000	100% CWT only and/or PBT	200,000	Supplementation	BPA/MA/ PUD	3,4
Subtotal				**3,250,000**		**3,000,000**			

Table B7. Coho - continued

Basin: Snake River

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 8]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Clear Cr., Lapwai Cr., Nez Perce Tribal Hatchery	Eagle Creek	Early	Smolt	550,000	60k CWT, 15K PIT	550,000	Supplementation	MA/ PCSRF	
Grande Ronde/ Lostine River	Cascade	Early	Smolt	500,000	100% Ad-clip 90k CWT	0	Fishery/ Reintroduction	MA	5
Clear Creek	Dworshak/ Kooskia	Early/Late	Smolt	500,000	TBD	500,000	Supplementation	PCSRF	7
Subtotal				**1,550,000**		**1,050,000**			

Basin: Columbia River- Bonneville to McNary

Release Site	Rearing Facility	Stock	Life stage	Target Release Number	Mark [1, 8]	Non-Ad-Clipped [2]	Primary Program Purpose	Funding	Foot-notes
Umatilla R (Pendleton Acclimation Pond)	Cascade	Early	Smolt	500,000	400K Ad-Clip, 100k CWT only	100,000	Supplementation/ Fishery	MA/BPA	5
Klickitat River	Klickitat Hatchery	Late	Smolt	1,000,000	100% Ad-Clip, 45k CWT	0	Fishery	MA	6
Klickitat River	Washougal	Late	Smolt	2,500,000	100% Ad-Clip, 75k Ad-CWT	0	Fishery	MA	
Subtotal				**4,000,000**		**100,000**			
Grand Total- Coho Salmon				**8,800,000**		**4,150,000**			

Footnotes for Table B7: Coho Salmon

1. The category 'Mark' may include fish that are adipose fin clipped (Ad-Clip), regardless of funding source. The tribes do not agree with the concept of mass marking production using an adipose fin clip for anything other than evaluation purposes. Non-treaty Parties may propose to use mark-selective fishing techniques that allow for a higher harvest rate on hatchery fish marked with an adipose fin clip compared to fish not so marked. Non-tribal Parties also recognize that mass marking by adipose clipping facilitates broodstock management and hatchery/natural-origin stock assessment.
2. The federal Parties will, to the extent required by law, consider the other Parties' recommendations and the United States' trust and treaty responsibility to the Tribes before deciding marking priorities. The category "Non-Ad-Clipped" may include fish marked by other means such as CWT, PIT, or VIE tags. Nothing in this Agreement shall be interpreted to prevent the federal Parties and/or states from mass marking fish required to be marked under Congressional acts directing the mass marking of Chinook, coho, and steelhead intended for harvest which are released from federally operated or financed hatcheries. In the event USFWS and/or states mark fish inconsistent with Tables B1-B7, nothing in this Agreement prevents any Party from challenging these acts. In the event of insufficient funding to carry out such marking, the federal Parties will consult with the other Parties to review and revise the priorities in any marking plan provided for under this Agreement.
3. Upper Columbia Reintroduction Program is in transition from feasibility phase to long term production phase. Production numbers and release locations may change based on agreement of the Parties.
4. The 200,000 acclimated smolts identified for release at the Winthrop NFH complex includes full-term reared, on-station and/or Lower Columbia River transferred back-channel releases. This is a reduction from prior on-station releases due to a shift in production being distributed to upstream acclimation sites.
5. Co-managers will review pilot program performance adult return data and factors impacting survival (ocean conditions, in-river survival, fisheries, etc.) no later than 2022 and make a decision on whether to 1) transition to local broodstock development, 2) extend the pilot program, or 3) discontinue the releases. Release of this group of fish will revert back to the Umatilla River should co-managers decide to discontinue the program.
6. Implementation of the Klickitat Basin Anadromous Fisheries Master Plan (2012) will result in upgrades at the Klickitat Hatchery and changes to this program if and when a lower Klickitat River acclimation facility is constructed. The Parties will collaborate per Part III.H of this Agreement on proposed changes to this program.
7. For a period of 3-5 years, approximately 100,000 of this release will be from an experimental later returning stock (Kalama). NPT will work with ODFW, WDFW, and USFWS to ensure these fish are produced – from egg availability, fish health sampling, rearing space, marking, to release. NPT staff will implement an M&E plan to determine if late stock releases from the Snake Basin are successful. This group of fish will receive a unique mark for M&E purposes and representative CWT groups as determined annually by the local co-managers during the Annual Operation Plan meeting. If the survival and/or returns of this late stock do not prove to be beneficial to the Tribal program, the NPT reserves the right to return to utilizing an early stock for production of this group of fish.
8. For some Coho hatchery programs, tissue samples are collected annually from broodstock and incorporated into a parentage-based tagging (PBT) baseline. The hatchery programs with broodstock sources above Bonneville Dam effectively 'tag' ~90-100% of annual releases. However, smolts released above Bonneville Dam that are sourced from broodstock below the Dam are not identifiable using PBT (not all broodstock in the lower river are PBT-sampled).